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NOTICE OF ALLOWANCE AND FEE(S) DUE

26263 7590 12/22/2008

CHICAGO, IL 60606-1080

SONNENSCHEIN NATH & ROSENTHAL LLP P.O. BOX 061080 WACKER DRIVE STATION. SEARS TOWER EXAMINER
ZIMMERMANN, JOHN P

PAPER NUMBER

ART UNIT

DATE MAILED: 12/22/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/534,177	02/07/2006	Soichi Kuwahara	09792909-6250	9986			
TITLE OF INVENTION: PRINTING DEVICE AND PRINTING METHOD							

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/23/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

maintenance fee notificat	d below or directed our ions.	nerwise in Block 1, by (a) specifying a new corres	pondence address;	red). Blocks 1 through 5 : ill be mailed to the current and/or (b) indicating a sep	Marate FEE ADDRESS TO
CURRENT CORRESPONDE	ENCE ADDRESS (Note: Use Bi	lock 1 for any change of address)	Feet	s) Transmittal Thi	mailing can only be used for s certificate cannot be used l paper, such as an assignm of mailing or transmission.	for any other accompanying
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CHICAGO, IL 6	0000-1080					(Depositor's name)
						(Signature)
						(Date)
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EXAM	INER	ART UNIT	CLASS-SUBCLASS			
ZIMMERMA	NN, JOHN P	286I	347-005000			
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 1/122) attached. cation (or "Fee Address 2 or more recent) attach	mge of Correspondence "Indication form and. Use of a Customer A TO BE PRINTED ON	2. For printing on the p (1) the names of up to or agents OR, alternativ (2) the name of a singl registered attorney or a 2 registered patent atto listed, no name will be THE PATENT (print or ty data will appear on the p Va substrints for filin as	3 registered paten vely, e firm (having as a agent) and the name meys or agents. If a printed.	member a 2	document has been filed for
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4a. The following fee(s) a Issue Fee Publication Fee (N Advance Order - #	o small entity discount p		A check is enclosed. Payment by credit car	d. Form PTO-2038 authorized to char	ge the required fee(s), any d	
	SMALL ENTITY state	as. See 37 CFR 1.27.			LENTITY status. Sec 37 C	
NOTE: The Issue Fee and interest as shown by the r	I Publication Fee (if req ecords of the United Sta	uired) will not be accepte ites Patent and Trademark	ed from anyone other than t k Office.	he applicant; a regi	stered attorney or agent; or t	he assignee or other party ir
Authorized Signature				Date		
Typed or printed name				Registration N		
This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this bu- irginia 22313-1450. DC 13-1450.	CFR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain or r 1.14. This collection is est depending upon the indiv the Chief Information Office COMPLETED FORMS TO	etain a benefit by the imated to take 12 redual case. Any co er, U.S. Patent and O THIS ADDRESS	he public which is to file (an ninutes to complete, includi mments on the amount of ti Trademark Office, U.S. Dep J. SEND TO: Commissioner	d by the USPTO to process ng gathering, preparing, and ime you require to complete partment of Commerce, P.O. for Patents, P.O. Box 1450

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

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CHICAGO, IL 60606-1080

UNITED STATES PATENT AND TRADEMARK OFFICE

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SONNENSCHEI	N NATH & ROSEN	ZIMMERMANN, JOHN P		
P.O. BOX 061080		ART UNIT	PAPER NUMBER	
WACKER DRIVE	STATION, SEARS T			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/534,177 KUWAHARA ET AL. Notice of Allowability Examiner Art Unit John P. Zimmermann 2061 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to RCE 02 October 2008. 2. The allowed claim(s) is/are 2-6 and 8. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) X All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. __ 3. \(\overline{\text{Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. 🗌 Other ____.

/LUU MATTHEW/

Supervisory Patent Examiner, Art Unit 2861

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 16 June 2008 has been entered.

Allowable Subject Matter

- Claims 2 & 8 are allowed as amended.
- 3. Claims 3-6 are allowed as presented, dependent on claim 2.
- The following is an examiner's statement of reasons for allowance:
- 5. As related to amended independent claim 2 an additional search was conducted based on the amendments to the claim and the existing prior art of record as well additional related art fails to teach or fairly suggest a printing apparatus comprising all of the specific features and limitations as recited, in combination with and particularly including a plurality of heads disposed in a staggering overlapping relationship in a width direction of a printing medium, a pitch between ink discharging portions located at ends of adjacent heads is identical to a space between ink discharging portions of each of the plurality of heads.
- 6. As related to amended independent claim 8 an additional search was conducted based on the amendments to the claim and the existing prior art of record as well additional related art fails to teach or fairly suggest a printing method comprising all of the steps and incorporated

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Art Unit: 2861

with the specific features and limitations as recited, in combination with and particularly including a plurality of heads disposed in a <u>staggering overlapping</u> relationship in a width direction of a printing medium, a <u>pitch</u> between ink discharging portions located at ends of adjacent heads is <u>identical to a space</u> between ink discharging portions of each of the plurality of heads.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Zimmermann whose telephone number is (571)270-3049. The examiner can normally be reached on Monday - Thursday, 7:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Luu can be reached on 571-272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LUU MATTHEW/ Supervisory Patent Examiner, Art Unit 2861